

CLAIMS

What is claimed is:

1. An apparatus comprising:

a data processing device having a memory for storing program code and data and a processor for processing the program code and data, and a display for displaying graphical images and text;

a control wheel rotatably and communicatively engaged with the data processing device, the control wheel causing a graphic element on the display to move in a first direction by a first predefined amount when rotated in a first direction and causing the graphic element to move in a second direction by the first predefined amount when rotated in a second direction;

a first input button communicatively coupled to the data processing device and positioned directly adjacent to the control wheel in the first direction; and

a second input button communicatively coupled to the data processing device and positioned directly adjacent to the control wheel in the second direction,

wherein the first input button causes the graphic element to move in the first direction by a second predefined amount when selected and wherein the second input button causes the graphic element to move in the second direction by a second predefined amount when selected.

2. The apparatus as in claim 1 wherein the graphic element is a graphical cursor.

3. The apparatus as in claim 2 wherein the first predefined amount comprises a single cursor jump and wherein the second predefined amount comprises a full page jump.

4. The apparatus as in claim 2 wherein the first input button is a page up button and the second input button is a page down button, causing the cursor to jump a page up in the first direction or a page down in the second direction, respectively.

5. The apparatus as in claim 1 wherein the control wheel comprises a switch triggered when the control wheel is depressed towards the data processing apparatus.

6. The apparatus as in claim 5 wherein a graphical element highlighted on the display is selected responsive to the switch triggering.

7. The apparatus as in claim 6 wherein the control wheel comprises a light emitting diode ("LED") configured to generate light responsive to control signals generated by the data processing device.

8. The apparatus as in claim 7 wherein the control signals are generated responsive to an incoming telephone call directed to the data processing apparatus.

9. The apparatus as in claim 1 wherein the data processing apparatus includes a first operating mode and a second operating mode;

wherein in the first operating mode, the first input button causes the graphic element to move in the first direction by a second predefined amount when selected and wherein the second input button causes the graphic element to move in the second direction by a second predefined amount when selected; and

wherein in the second operating mode, the first input button causes the data processing device to answer an incoming telephone call and/or to initiate an outgoing telephone call when selected, and wherein the second input button causes the data processing device to disconnect a telephone call when selected.

10. The apparatus as in claim 1 further comprising:

an alphanumeric keyboard configured on the data processing device to provide alphanumeric data entry functions.

11. The apparatus as in claim 1 further comprising:

a speaker and microphone configured on the data processing device to provide audio input/output functions.

12. The apparatus as in claim 11 wherein one of the audio input/output functions comprises telephony audio functions.

13. An apparatus comprising:

a data processing device having a memory for storing program code and data and a processor for processing the program code and data, and a display for displaying graphical images and text, the display having a top side, a bottom side, a left side, and a right side;

a control wheel rotatably and communicatively engaged with the data processing device, the control wheel causing a graphic element on the display to move in a first direction by a first predefined amount when rotated towards the top side of the display and causing the graphic element to move in a second direction by the first predefined amount when rotated towards the bottom of the display;

a first input button communicatively coupled to the data processing device and positioned directly adjacent to the control wheel on a side of the control wheel positioned towards the top of the display; and

a second input button communicatively coupled to the data processing device and positioned directly adjacent to the control wheel on a side of the control wheel positioned towards the bottom of the display,

wherein the first input button causes the graphic element to move in the first direction by a second predefined amount when selected and wherein the second input button causes the graphic element to move in the second direction by a second predefined amount when selected.

14. The apparatus as in claim 13 wherein the control wheel, first input button and second input button are positioned adjacent to the right side of the display.

15. The apparatus as in claim 13 wherein the graphic element is a graphical cursor.

16. The apparatus as in claim 13 wherein the first predefined amount comprises a single cursor jump and wherein the second predefined amount comprises a full page jump.

17. The apparatus as in claim 15 wherein the first input button is a page up button and the second input button is a page down button, causing the cursor to jump a page up in the first direction or a page down in the second direction, respectively.

18. The apparatus as in claim 13 wherein the control wheel comprises a switch triggered when the control wheel is depressed towards the data processing apparatus.

19. The apparatus as in claim 18 wherein a graphical element highlighted on the display is selected responsive to the switch triggering.

20. The apparatus as in claim 19 wherein the control wheel comprises a light emitting diode ("LED") configured to generate light responsive to control signals generated by the data processing device.

21. The apparatus as in claim 20 wherein the control signals are generated responsive to an incoming telephone call directed to the data processing apparatus.

22. The apparatus as in claim 13 wherein the data processing apparatus includes a first operating mode and a second operating mode;

wherein in the first operating mode, the first input button causes the graphic element to move in the first direction by a second predefined amount when selected and wherein the second input button causes the graphic element

to move in the second direction by a second predefined amount when selected;
and

wherein in the second operating mode, the first input button causes the data processing device to answer an incoming telephone call and/or to initiate an outgoing telephone call when selected, and wherein the second input button causes the data processing device to disconnect a telephone call when selected.

23. The apparatus as in claim 13 further comprising:

an alphanumeric keyboard configured on the data processing device to provide alphanumeric data entry functions.

24. The apparatus as in claim 13 further comprising:

a speaker and microphone configured on the data processing device to provide audio input/output functions.

25. The apparatus as in claim 24 wherein one of the audio input/output functions comprises telephony audio functions.

26. The apparatus as in claim 13 wherein the first direction is towards the top side of the display and wherein the second direction comprises towards the bottom side of the display.

27. The apparatus as in claim 13 wherein the first direction is towards the right side of the display and wherein the second direction comprises towards the bottom side of the display.

28. An apparatus comprising:

data processing means having a memory for storing program code and data and a processor for processing the program code and data, and a display for displaying graphical images and text;

a rotatable input means rotatably and communicatively engaged with the data processing device, the rotatable input means causing a graphic element on the display to move in a first direction by a first predefined amount when rotated towards the top side of the display and causing the graphic element to move in a second direction by the first predefined amount when rotated towards the bottom of the display;

first input means communicatively coupled to the data processing device and positioned directly adjacent to the control wheel on a side of the control wheel positioned towards the top of the display; and

second input means communicatively coupled to the data processing device and positioned directly adjacent to the control wheel on a side of the control wheel positioned towards the bottom of the display,

wherein the first input means causes the graphic element to move in the first direction by a second predefined amount when selected and wherein the second input means causes the graphic element to move in the second direction by a second predefined amount when selected.